

# EUROPEAN PATENT OFFICE

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APPLICANT : OSADA RES INST LTD;

INVENTOR : HIEJIMA SHINJI;

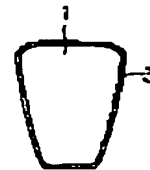
INT.CL. : A61C 13/08

TITLE : ARTIFICIAL TOOTH

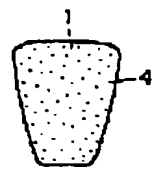
(A)



(B)



(C)



ABSTRACT : PROBLEM TO BE SOLVED: To provide a hygienic artificial tooth which eliminates adhesion of plaque or the like by making the artificial tooth antibacterial.

SOLUTION: A titanium oxide film 2 is formed on the surface of an artificial tooth 1 to make it antibacterial (Fig.(A)), a film 3 containing titanium oxide is formed on the surface of the artificial tooth 1 (Fig. (B)) or particles 4 of the titanium oxide are contained in the artificial tooth itself (Fig. (C)). The titanium oxide ( $\text{TiO}_2$ ) works as photocatalyst and has a property of decomposing water( $\text{H}_2\text{O}$ ) and oxygen ( $\text{O}_2$ ) exposed to light to generate active oxygen. The active oxygen has a powerful bactericidal action and the oxidation decomposing power thereof kills bacteria by damaging them. Moreover, the oxidation decomposing power also decomposes organic substances, inorganic gases and the like to be effective for the prevention of fouling and odor and further can kill fungus (mildews) other than the bacteria.

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